THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS

FROM PRESIDENT'S DESK

The year 2006 has indeed been an exciting year for IETE as can be gauged from the professional and technical activities at many IETE local/sub centers and the HQ. I take this opportunity to congratulate you all, the experts and IETE members, who have contributed in enhancing the image of IETE and its development throughout the year.

Globally, it was technology with applications in the various domains of ICT that dominated the scene, making the world smaller and attractive. The most visible and significant fields were nanotechnology, MEMS, robotics, e-commerce, e-learning, telemedicine, mobile communications and broadband technology. At the national level, the initiatives of the Government have resulted in fastest growth rate of telecom subscribers in the world and attracting foreign direct investments in telecom and hardware sectors. One India One Rupee call, set of recommendations by TRAI and its acceptance by and large across the telecom sector were other milestones. The convergence and confluence of ICT with entertainment, domain knowledge and communications played significant role in furthering country's development and image globally. However, there are other serious challenges to be overcome but our country certainly seems to be equipped and determined to be on way to achieve higher goals. At IETE, we tried to harness the globalization by deliberating on ICT related, academic and professional issues. We are pursuing those facets of ICT which benefit all sections of our society. Recently IETE Nagpur Centre, organized a national seminar on "The Need for Convergence of Information Technology and Farming Technology to reduce the suicides of Farmers in Maharashtra" to discuss the possible ways and means to help the rural population by solving their problems through ICT technologies. In this pilot project, IETE Nagpur Centre is going to adopt 5 nearby villages, provide them with a computer and internet connection and educate them to use the information for their farming activities. Similar kind of project is being contemplated by IETE at Warangal Centre.

There will be acute shortage of manpower in semiconductor fabrication industry which is coming in a big way to India. IETE should collaborate with industry and take up programmes to train engineers in VLSI design, validation, testing & fabrication.
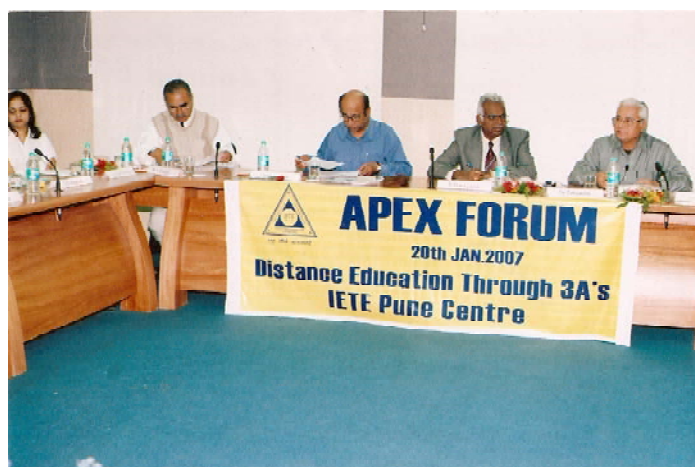
In 2007 we want to pursue excellence with greater zeal by fostering our strengths and contributing towards global competitiveness in human resource development. Let's extend our reach and provide easy access to all those who desire to improve their qualifications and skills by taking education to the doorsteps of the students living in remote areas. Let's design and initiate effective programmes for fulfilling the student's aspirations.

I also take this opportunity to invite you all to the 38th Mid-Term Symposium of the IETE on "Emerging Trends in Instrumentation and Process Automation" scheduled for 7-8 April 2007 at IETE Vadodara Centre. I request you to send your suggestions and inputs to ietend@bol.net.in. These are very valuable to us for our growth.

S NARAYANA

Apex Forum discussions in progress at IETE Pune centre.

President IETE, Shri S Narayana, releasing the Delhi centre's Newsletter during his visit to the local centre.

Prof K C Gupta, Professor Emeritus, University of Colarado, being felicitated by IETE Chandigarh centre on December 21, 2006.

President IETE lighting the lamp at inaugural session of seminar on "The Need for the Convergence of Information Technology and Farming Technology to Reduce the Suicides of Farmers in Maharashtra" at Nagpur centre.

One day seminar on "Next Generation Networks" inaugurated by Shri S R Pillai, CGM, BSNL, Kerala Circle on Jan 20, 2007 at Trivandrum centre.

News From Headquarters

IETE APEX Forum

Under the Industrial Coordination Committee, one of objectives of the IETE is to hold Apex Forums and focused meetings and discussions involving eminent personalities on important subjects to promote IT, Telecommunications and Broadcasting, their applications and make available recommendations of such deliberations to concerned authorities. Such forums which are held in the form of interactive round table conferences are organized at different places in the country. The first Apex Forum of this year was arranged at Pune and the other forums are scheduled at Delhi, Kolkata and Bangalore.

The IETE Pune centre arranged the Apex Forum on the subject of **"Distance Education through 3 A's (Anytime, Anywhere to Anyone)"** on Jan 21, 2007. The President IETE, Shri S Narayana, inaugurated the forum and Shri Arun Nigavekar, conducted the meet. Presentations were made by eminent experts like, Dr Arun Nigvekar, Dr Ram Takawale, Shri Pawan Gupta Ms Swati Choudhari, Shri M G Kulkarni, Prof S V Kharkar, Dr Abhay Karandikar, Dr Vijay Bhatkar and Dr Gadre.

Recommendations

The following recommendations were formulated unanimously by the experts:-

1. In 17 to 21 years age group, hardly 10% get opportunity for higher education and this is likely to reach 16% by 2011. It is therefore necessary to start the distance education through 3A's immediately so that a vast potential human resource in smaller cities and villages gets tapped and utilized for the country. For this purpose all the different avenues for example telephone, fax, TV, VCD & DVD with DVD player, Internet (Web based training using multimedia and digital tools, using dialup as well as broadband connections), Satellite channels and OFC network should be deployed according to feasibility. Inverters with 10 hours battery back- up can be used in the areas with power shortages.

2. EDUSAT should be made available for recognized private educational institutions as well as the Govt institutions for virtual classrooms for theory portions and DTH for students who opt for studying at home. We should record live lectures and prepare DVDs for this purpose.

3. For laboratory practice work in engineering courses, virtual electronics lab facility should be made available, to those who are staying away, for their initial preparation and revision.

4. The new educational outline should envisage effective and complementary use of conventional and open distance learning systems. This demands, building of academic and structural bridges between the two systems.

5. Synergy of subject matter experts and instructional designers can produce excellent teaching material by driving the content module creation through pedagogy plus instructional sciences using cognitive concepts. Thus progressively even latest developments like IP based TV (content delivered through broadband connections) and iPod-Casts can be deployed for downloading multimedia based contents using digital tools, as the costs come down. The criteria that can be applied for quality will be for better knowledge dissemination, an increased depth of understanding, learner-centric delivery, kindling imagination and creativity, as well as enhancement of competency.

6. The expansion of comfort zone for technology for content development and training the teachers in creating the contents is an immediate requirement. Awareness campaign for expansion of comfort zone should be undertaken.

7. Treating a student as a customer and paying individual attention to the student's progress, identifying his weaknesses and strength should be aimed at. Frequent revision of syllabi for keeping them relevant is desirable. Suitable call center like communication channels with multiple answering positions should be employed by distance learning centers. Services of good distance learning centers for out sourcing of course material if available should be utilized.

8. Honorarium for content preparation should be given similar to publishers paying authors for textbooks preparation.

9. Distance education should be made affordable through appropriate govt policy. This can be done by subsidizing distance education related hardware and encouraging its mass indigenous manufacture apart from reducing import duties.

10. Professional institutions like IE and IETE should utilize their huge databanks for content preparation and should take lead in starting distance education. Govt should give recognition to degrees offered by recognized private and Govt institutions, which opt for distance education at subsidized cost.

11. Time has come to dispense with the concept of conventional education in a rigid time frame and accept a more flexible approach of *adaptive pace of learning,* with minimum and

maximum duration for completion of a degree or other programs as done in open and distance educational systems.

12. Political wisdom and social awareness for distance learning should be inculcated through constant persuasion.

13. Content creation for higher productivity and problem solving ability should be a continuous process. Learning rather than teaching should be the criteria for a good content.

14. e–Libraries easily accessible through information kiosks/ home PCs should be made available to registered students. Similarly VCD/ DVDs prepared by institutions for a particular course should be kept in libraries and should be made easily available to students.

15. Open source software should be promoted for the use of every one.

16. Cross-institutional collaboration to support innovations should be promoted.

17. Reusable learning objects– repository, which can be used through inter-institute collaboration, can be created.

18. Trans- modal education to provide opportunities to change between conventional and distance at their own pace and time should also be promoted.

IETE President visits IETE Delhi centre

President IETE, Shri S Narayana visited IETE Delhi centre on Dec 8, 2006 accompanied by Shri P P Malhotra, North Zone Coordinator, Prof Laxminarayana, Chairman, MLCC, and Shri K S Prakash Rao, South Zone Coordinator. During the visit, Shri Narayana was briefed about the various problems being faced by the centre, the determination of the centre's Executive Committee to work hard and enhance the image of Delhi centre. On this occasion, the President also released the first newsletter of the Delhi centre for the current year. Shri P P Malhotra appreciated the technical activities conducted by the centre and the technical visits organized to industries for the benefit of IETE students. Prof Laxminarayana and Shri K S Prakash Rao applauded the efforts of the EC and apprised them about various initiatives taken by Hyderabad centre to increase revenue and to organise more technical courses. Shri Narayana, while expressing his satisfaction, suggested some ways and means to enhance the strength of students and membership and to launch short-term value added courses. He assured his full support to IETE Delhi centre.

IETE Secretary General

Brig (Retd) V K Panday (F099223L) has joined the Institution of Electronics and Tele-communication Engineers as Secretary General from Jan 2007 after retiring from the Corps of EME, Indian Army. Commissioned in Dec 1972, he served the Indian Army for 34 years where he held many prestigious staff, regimental and instructional appointments, important ones being Deputy Director EME of a pivot Corps of Army; Commanding Officer of an EME Bn in Counter Insurgency Operational Area; Dean of Faculty of Industrial Engg and Tactics at MCEME, Secunderabad; Director Coordination at Army HQ (EME Br); Head of Department of Degree Engineering Wing at MCEME; Asst Director EDP at Directorate of Standardization, Min of Defence, New Delhi and Instructor at EME School, Vadodara as well as MCEME, Secunderabad. Brig V K Panday has obtained degrees of BSc from Meerut University, BTech from MCEME, Secunderabad and Post Graduation in Opto Electronics from IIT Delhi/ Queens University of Belfast, UK. He did Advance Diploma in Radar Technology and Diploma in EDP from MCEME and MCTE, Mhow, respectively. In addition, he also successfully qualified in capsule courses on "Creative Decision Making" at IIM, Kozhikode and "Independent Directors Course" conducted jointly by S P Jain Institute of Mgmt, Mumbai and Bombay Chartered Accountant Society, Mumbai. Brig Panday was awarded Chief of Army Staff Commendation in Jan 1988 for his meritorious service and work on computerization on codification of Defence Inventory.

IETE congratulates and welcomes him as Secretary General and look forward to work under his leadership with renewed enthusiasm.

NEWS FROM LOCAL CENTRES

Bangalore

- **IEEE-International Symposium on Microwaves (ISM-06)** was held at IETE Bangalore Centre from 15-17 Dec 2006. Pre-Symposium Tutorials were held on Dec 15, 2006. The lectures held under Tutorial-I "Microwave School" were: "Relevance of Microwaves in Modern World" by Prof R P Shenoy; "Fundamentals of Microwaves" by Prof T S Vedavathy, IISc, Bangalore; "Transmission Lines" by Prof A Kumar, IISc, Bangalore; "Microstrip Lines /MIC" by Prof S Raghavan, REC, Trichy; "Antennas" by Shri V Mahadevan, ISRO Satellite Centre, Bangalore; "Special Devices" by Dr A T Kalghatgi, Chief Scientist, CRL, BEL, Bangalore. Tutorial-II had lectures on "Millimeter Wave & Fibre Radio Applications" by Dr Stavros Lezekiel, University of Leeds (UK) and "Applications of MEMS in Microwave Products" by Prof S K Koul, IIT, Delhi.

Dr K N Shankara, Director, ISRO Satellite Centre, inaugurated the symposium on Dec 16, 2006 and delivered the inaugural address. The keynote address was by Prof N Balakrishnan, Addl Director SERC, IISc, Bangalore. Plenary Session Talk-I was on "Microwaves in Industry" by Dr M H Kori, Technical Director, Lucent Technologies. The Talk-II was on "Microwave in Defence" by Shri K U Limaye, Former CCR&D, DRDO. The other lectures held were on Computational Techniques, Biological and Medical Applications, Antennas, Active/ Passive Arrays, Power Amplifier Devices & ICs, Microwave Active/ Passive/ Tunable Devices.

The lectures covered on concluding day were on "A Travelling Wave Concepts Applied to Microwave Photonic Components and Links" by Dr Stavros Lezekiel; "Recent Progress in Voltage Tunable Dielectrics for Microwave Application" by Dr Subramanyam, Univ of Dayton, Dayton, Ohio, USA, "Air/ Shipborne Microwave Systems", "Microwave in Wireless/ Cellular/ Broadband Communication Systems", "MEMS Components & Technologies", Instrumentation & Measurement Techniques", "Millimeter and Terahertz Components Technologies", "Special Microwave Application". 21 stalls were exhibited in all including IETE's & IEEE's.

● Shri Sai Kumar conducted two days practical oriented workshop on Real Time Operating Systems (VS Works) at the centre on Jan 6 & 7, 2007.

Bhopal

A lecture on **"Some issues on CMOS-VLSI Design"** by Dr Arun N Chandolkar, Electrical Engg Dept, IIT, Mumbai at MANIT, Bhopal on Feb 01, 2007. He discussed about the power saving at different levels in the chip, power metrices, power dissipation in interconnects, power delay product and other aspects of chip design. The others present on the occasion were : Dr R P Singh, Chairman, IETE Bhopal centre, Dr S D Sapre, Head Electronics Dept, MANIT, Bhopal, Dr S C Shrivastava, Dr Aditya Goel, Dr Jyoti Singhai, Mrs N R Trivedi, and Mrs Kavita Khare.

Chandigarh

A lecture on **"RF and Microwave Techniques"** by Prof K C Gupta, Professor Emeritus, University of Colorado was arranged by IETE Chandigarh centre on December 21, 2006, wherein he highlighted the importance of RF and Microwave Techniques in India. He also acquainted the audience with the activities of IEEE Microwave Theory and Techniques Society's sponsorship of conferences, in RF and Microwave Techniques area, in India. Shri D S Pathania, Chairman, IETE Chandigarh centre, thanked Prof Gupta for his lecture and hoped for more interaction in the field in near future.

Chennai

The centre organized a technical lecture on **"Embedded System"** by Shri N Murali, Head Real Time System Section, E&I Division, IGCAR, which was attended by more than 200 students and other members of IETE.

Coimbatore

The Coimbatore sub-centre conducted the following activities:-

1. A workshop on **"PIC Microcontrollers"** by Dr T R Padmanabhan, Immediate Past President of IETE Coimbatore Centre on Nov 27, 2006.

2. A seminar on **"Higher Education in Germany: Opportunities and Challenges"** by Shri Vinay Aggarwal, Faculty, Technical University of Berlin, Germany on Jan 9, 2007.

3. A seminar on **"Higher Education in USA"** by Dr V Raju, Director-Science & Technology, College of Technology, State University of New York, Farmingdale, USA on Jan 19, 2007. Prof K Gangadharan, Chairman of IETE Coimbatore presented a memento on behalf of the sub-centre. The IETE Students' Forum Members were greatly benefited by the eminent academician from USA.

4. A seminar on **"Broadband Wireless Technologies"** by Shri A Ganesan, Chairman of IETE Chennai Centre on Jan 22, 2007. Prof K Gangadharan, Chairman of IETE Coimbatore centre presided over the function.

Goa

IETE, Goa sub-centre, organized a lecture session on **"Recent Trends in Digital Communication"** for the technical teachers at various engineering colleges in and around Goa on Nov 20, 2006. Shri Deepak Chodankar, Vice-President, R&D, D-Link, Verna, conducted this lecture. About 35 faculties of various engineering & diploma colleges from Goa, Maharashtra and Karnataka attended and appreciated the program. Interaction between representatives of technical institutes and industries was held to bring better coordination between them.

Gwalior

● A national seminar on **"IT Enabled Systems"** was organized at Maharana Pratap College of Technology, Gwalior, with association of CSI, Gwalior Chapter and IETE sub-centre. The seminar was inaugurated by Hon'ble Dr Komal Singh, Commissioner of Gwalior Division along with Dr M L Goyal, Council Member; Shri Lalit Shawhney, President CSI; Dr D P Agrawal, Member UPSC; Shri R S Dhakre, Chairman Pratap Vahini Samaj Kalyan Sansthan, Gwalior. Dr Komal emphasized on various

points like value addition of the products, application of technological knowledge for mankind, bridging the gap between rural & urban development, leverage for development and positive thinking for use of information technology. Shri Lalit Shawhney, Dr M L Goyal, Dr D P Agrawal also spoke on the occasion. Hon'ble Justice, Shri A K Gohil, the Chief Guest of the valedictory function, expressed requirements of the law on Cyber Crime & making the judiciary aware of the technology of the IT Enabled Systems. 35 papers were presented in four different sessions spread over two days on the topics of speech recognition, cellular mobile, bioinformatics, web designing, security & encryption of data.

- **A National Education Conclave** was organized on 11-12, Dec 2006 at Scindia Kanya Vidhyalaya, Gwalior. 20 stalls were exhibited by different institutions. The students from twelve different schools of Gwalior and places like Shivpuri, Datia, Dabra and Morena visited the stalls. Wide publicity of IETE was done through the display of banners at prominent schools of Gwalior and through local news papers.

Hyderabad

2ⁿᵈ Prof Alladi Prabhakar Endowment Lecture on **"Technology for the Common Man"** by Dr Krishna Tanuku, Advisor and Mentor, Indian School of Business, Hyderabad was organized by IETE Hyderabad centre on Dec 15, 2006. A book titled "Essays and Articles" by Prof Alladi Prabhakar was released by Dr Roddam Prabhakar Rao, IPS, former DGP, AP and the author was felicitated on the occasion. Shri R Venkataraman, Chairman, IETE Hyderabad centre presided over the function.

Nagpur

"The Need for the Convergence of Information Technology and Farming Technology to Reduce the Suicides of Farmers in Maharashtra" was the seminar conducted by IETE Nagpur centre on Jan 21, 2006, in view of the plight of farmers in Vidarbha region resulting in numerous suicides. Shri S Narayana, President, IETE presided over the function. Shri R K Gupta, the Chairman of the Technical Programme Committee (TPC), was the Chief Guest. Shri Vijay Jawandhiya, an agricultural activist & one of the founder members of "Shetkari Sanghatna", an organization working for the betterment of farmers and Shri K Narayanan, the Principal General Manager, BSNL, Nagpur, were the Guests of Honour.

In the opening address, Lt Col R M Onkar, Chairman of the centre stressed on the implementation of the convergence of the ICE technologies with the farming technology to empower the farmers to do better. The Guest of Honour, Shri K Narayanan, pointed out various problems faced by the farmers like seasonal rains, loans and overall lack of knowledge. He said that to ease out the problems only knowledge was the key. Shri Javandhiya was of the opinion that though technology has slowly but steadily permeated the agricultural sector, but there is poor use of technology because of lack of information and its poor application. Shri R K Gupta stressed on the importance of changing the mindset of the people concerned and making them savvy to the new technologies at hand. He even suggested of providing an alternate source of income to the farmers.

Shri S Narayana in his presidential address highlighted the fact that well-intentioned initiatives were being hindered and obstructed by the corrupt individuals, but that should not be the case with an experimental initiative on the part of IETE Nagpur, wherein five villages near the city would receive the computers with connectivity, as well as few information kiosks would empower them out of farming problems. A few youngsters would be given training on use of Internet and the IETE centre would also mail weather reports to them for their use. In the second phase of the pilot project, the centre has planned for the job related computer education to the village boys and providing them with sufficient job work. It is hoped that this type of convergence of Information Technology & Farming Technology would increase income of the farmers; advance information would reduce wastage due to natural cause. Results would be studied and compared and publicized after some 3 years or so. The event was widely covered by the local dailies.

The seminar was divided into two technical sessions. The first technical session was held under the chairmanship of Dr K S Yawalkar, Scientist and Manufacturer of Pesticides. The speakers in the session were: Shri Vijay Jawandhiya, Wardha; Dr A K Sinha, Director, Maharashtra Remote Sensing Application Centre, Nagpur; Dr R T Gahukar, Consultant to Food and Agriculture Organization of United Nations. The second session was under the Chairmanship of Dr R T Gahukar. The speakers in this session were: Dr S V Khandewale, well-known economist; Dr K S Yawalkar; Shri Shabad Alra, Manager e-chaupal, ITC; Dr Lonare, Director Extension, MAFS University, Nagpur; Dr M S Kadu, former Dean of Animal Husbandry Punjabrao Krishi Vidyapeeth, Akola.

The seminar concluded with a panel discussion by Shri S Narayana, Shri R K Gupta, Shri Khandewale, Shri Gorowara, Shri P K Rangole, Dr M S Kadu, Dr D A Deshpande, Lt Col R M

Onkar, Dr Lonkar, Dr Gahukar as panelists. Shri Nitin Gujarathi of Premier Technology Group Limited, Nagpur, Vidyadhar Wankhede, a farmer of Kinhi Khurd Tq Bhivapur; Shri Krishna Halde, farmer, Mohapa Tq Kalmeshwar also participated in the panel discussion. It concluded with President's assurance of his full support for the implementation of the pilot project of IETE Centre, Nagpur.

Two corporate awards initiated by the IETE Nagpur centre were presented on the occasion included the Performance Excellence Award in the IT sector, which went to Premier Technology Group Ltd, Nagpur. The Performance Excellence Award in the Electronics Industry went to Adroit Industries. In the essay competition on the topic "Space around us", arranged by the IETE Nagpur centre, Disha Patel from Bhagwandas Purohit Vidya Mandir, was the winner. The school also received the late Ms Suraksh Gorowara Rolling Trophy, donated by Retd BSF DIG, Shri S P Gorowara in the memory of his late wife. The dignitaries were presented with mementoes and Dr K R Bagree, Hony Secretary of centre proposed the vote of thanks.

Pune

The following technical talks/ lectures were held at the centre as below:-

1. **Biometeric Recognition** by Prof (Mrs) Manisha Dale on Dec 9, 2007.

2. **Nano Technology Application** by Mrs Sangita Kale, Scientist on Oct 28, 2006

3. **Tomorrow's Global IT Professionals** by Shri Deepak Shikarpur, Chairman CSI, IT Expert, Pune.

Rajkot

IETE Rajkot sub-centre arranged a technical visit for the members from university, colleges and institutional professors to the Reliance Communication of Anil Dhirubhai Ambani Group on 23 Jan 2007 to commemorate the opening & functioning of the centre. Shri Dinesh Mavani, Cluster Lead-CDMA-Rajkot allowed the IETE members for this constructive and helpful visit. The engineers on duty explained the communication technologies and technical part of that control Unit to IETE members.

Thiruvananthapuram

The centre conducted one-day seminar on **"Next Generation Networks"** on Jan 20, 2007. Shri S R Pillai, CGM, BSNL, Kerala Centre, inaugurated the seminar. Shri R P Nair, Chairman, Trivandrum Centre, presided over the function. The keynote address was delivered by Shri R N Padukone, Senior DDG, TEC, New Delhi.

The first session was chaired by Shri John P Zechariah, Dy Dir, VSSC, TVM. The topics covered were: NGN Architecture by Shri J Gopal, CGM, MTNL, Mumbai; WiMAX- A Pathway to 4G by Shri Annamalai Murugappan, Intel, New Delhi and IP Multimedia Sub-System by Shri K V Balasubrahmanian, GM, BSNL, Virudhanagar.

Shri K J Chacko, CGM, BSNL (Retd) chaired the second technical session. The topics covered in this session were: Network Convergence by Shri S Prabhakaran, Principal Consultant, M/s CISCO, Chennai; Network Security by Shri K K Minocha, GM, Western Telecom Region, BSNL, Mumbai and Voice Over IP & SIP by Shri Mohanraj, Siemens. Delegates from BSNL, VSSC, RRL, KELTRON, HLL and Engg colleges attended the seminar.

Varanasi

A national seminar on **"Power Engineering Controls"** was organized by the IETE Varanasi sub-centre during Dec 17-18, 2006. Shri S Narayana, IETE President and Lt Gen A K Agarwal, PVSM (Retd), Vice President, chaired the inaugural session. Er Suharsh Avasthi, MD, Purvanchal Vidut Vitaran Nigam Ltd was the Chief Guest. The other dignitaries present on the occasion were Prof K P Singh, VC, VBS Purvanchal Univ; Er Ravindra Sharma, GM, Diesel Locomotive Works (Indian Railways); Shri K K Saxena, IG Police, Varanasi Zone; Prof H D Kumar, PhD (London) and former Dean, Faculty of Science and Group Coordinator Biotechnology Programme, BHU. Prof Kumar delivered the keynote address on "Some Emerging Nanotechnology for Today and Tomorrow". Shri S Narayana, President, IETE, talked on the importance of utility of nanotechnology in power conservation. He further emphasized on the property of any material that becomes extremely useful in nano form than its micro form particles. Nano Technology could reduce the power up to 90 percent. The Chief Guest, Er S Avasthi talked about the prediction of increase in the number of transistors on an IC in near future and also the speed of chip from MHz to GHz. Prof K P Singh emphasized on the primary source of energy like terrestrial solar and wind energy, solar panels, satellites which may harness solar power for use at earth stations; on the futuristic approach in the work on BIOMAS, nuclear fission and fusion besides fossil fuels. Er Susobhan Avasthi from IIT, Kanpur, delivered a very informative lecture about the most recent solar cell device emphasizing thin films and amorphous silicon. He talked about hotrod junction technologies like tandem cells and Cd, Te based technologies with higher efficiency. Prof H D Kumar elaborated in detail about the applications of Nanoscience and Nanotechnology. Er Kripa Sankar Singh, Chairman IETE sub-centre Varanasi, delivered the welcome address and Er D C Shukla, IBES,

Station Engineers, Doordarshan, extended the vote of thanks.

Visakhapatnam

IETE Visakhapatnam centre organized a Zonal seminar on **"Emerging and Converging Communication Technologies (SECT-07)"** during 10-11 February 07. About 400 delegates participated in the seminar from various engineering colleges, universities, R&D organizations. It covered topics like Nano Technologies, Antenna and Wave Propagation, Sonar and Underwater Communications, Modern Radar and Applications, Soft Computing Techniques etc. Six technical sessions for 60 contributed papers and six technical sessions for 60 student papers were scheduled during the seminar. Ten expert talks were delivered by eminent professors and scientists from various universities and R&D organizations. Scientists from NSTL, Visakhapatnam and DLRL, Hyderabad also participated in the seminar. IETE Council Members, South Zone Chairman, Secretaries had their meet at Visakhapatnam during the same dates. It was for the first time in the history of the institution, IETE council meeting was held at Visakhapatnam. The dignitaries present during the inaugural function were Prof L Venugopala Reddy, Vice Chancellor, Andhra University, Prof K K Aggarwal, Vice Chancellor, GGSIP University, Dr V Bhujanga Rao, Director, NSTL, Visakhapatnam, Shri S Narayana, President IETE, Prof Allam Appa Rao, Principal, AUCE, Visakhapatnam, Prof K S Prakash Rao, Zonal coordinator (South Zone), Prof R K Gupta, Chairman, TPC, and Prof K Laxminarayana, Chairman, MLCC. All dignitaries emphasized the importance of the theme of the seminar from various angles.

Dr M L Goyal, GM, Northern Region, CMC Ltd, New Delhi and Council Member, gave a very informative presentation on **"e-Governance: Experiences and Road Ahead",** during the Council meet. Explaining about e-governance, he talked about the first large e-governance Project: Railway Passenger Reservation System. He highlighted how the system changed the concept of computer applications in the country, its use in ticket reservation, modification, cancellation and integration of large databases, booking at any time from anywhere to anywhere, etc. Dr Goyal elaborated on the need of the replication of the concept for similar applications. The need to "Reach the Unreached" was emphasized. It was suggested to use ICT technologies to erase the two biggest hindrances, illiteracy and poverty; exploring the uses of WiMAX, creating the awareness of healthcare among rural masses, delivery of lessons by the best teachers from a location using Wide Area Network for a large part of population, imparting of information on the use of new types of seeds, fertilizers, mechanization, power and irrigation to the rural community in agriculture, need for a reliable and viable national IT infrastructure, a citizens' database with unique ID for every citizen to help reduce corruption and crime, implementation of e-governance applications at grass-root level, skill upgradation of govt officials and staff were some of the necessary steps to be taken in the direction.

Warangal

The sub-centre conducted the following activities during recent months :-

- A lecture on **"Civilian Application of Image processing"** was delivered by Dr K Veerabhadra Rao, GM, Iswarya Communications Ltd, Hyderabad on Dec 21, 2006.
- IETE Warangal sub-centre and Dept of ECE, KITS, Warangal together, organized a two-day workshop on **"DSP Tools"** on Dec 28-29, 2006 in Kakatiya Institute of Tech & Science premises. Prof V U Reddy, Chief Scientist, Hello Soft India Pvt Ltd, Hyderabad, the Chief Guest, delivered the keynote address during the occasion. Shri K V Sridhar, NIT, Warangal spoke on "DSP Architecture". Shri U Naresh Kumar, Scientist, RCI, Hyderabad talked on MATLAB and Code Composer Studio.

ISF ACTIVITIES

- ISF at **Madras Institute of Technology (MIT), Anna University, Chromepet, Chennai** was inaugurated on Oct 26, 2006. Shri A Ganesan, Chairman IETE Chennai centre presided over the function and delivered the guest lecture on Broadband Technologies.

- Dr R P Khambayat of NITTTR, Bhopal, delivered a lecture on "Learning in Industry" at **K K Wagh Polytechnic, Nashik** for the final year diploma students on Nov 10, 2006. He highlighted the importance of interview techniques, expectation of industrialists, qualities of technicians, their communication and skills, advantages of positive attitude and drawbacks of negative attitude. Dr K N Nandurkar, Principal, K K Wagh Institute of Engg Education & Research, Nashik; Prof M D Kokate, Principal, K K Wagh Polytechnic and Hony Secretary, IETE Nashik centre were present during the lecture.

- ISF at **RVR & JC College of Engg, Guntur,** was inaugurated on Dec 21, 2006 by the Chief Guest, Prof K Lakshminarayana. Shri C Venkataramanna, Chairman, Vijayawada centre was the Guest of Honour. The function was

presided over by Dr K Basava Punnaiah, President, Nagarjuna Education Society, Guntur. Others who graced the occasion were Dr P S Sankara Rao, Principal & Dr A Sudhakar, Prof & Head, Dept of ECE of RVR & JC College of Engg.

- ISF at **Sri Sai Ram Engg College** and IETE Chennai centre together organized a seminar on "IP TV" by Shri Ilanthirai DGM, BSNL, Chennai on Jan 20, 2007.

- The 3rd IETE Students' Forum under Palakkad sub-centre was inaugurated at **Al-Ameen College of Engineering, Kulapully-Shornapur, Pallakad Dist** on Jan 22, 2007 by Shri E Kasiviswanathan, GM, ITI, in a function chaired by Shri C K Haridas, Chairman, IETE Palakkad sub-centre.

- A lecture on "Pollution Microcontroller based Monitoring and Control Devices" by Prof Basudev Prasad, Head ECE & ISF Co-ordinator, **Indo Global College of Engineering, Abhipur, Mohali** was conducted on Jan 30, 2007. Also a quiz competition in the field of science, electronics and telecommunication was organized on Feb 6, 2007.

PAC ACTIVITY

The Dept of EC&TE of JNN College of Engineering, Shimoga with Professional Activity Centre (PAC) of IETE, organized one week Short Term Training Programme on **"Digital Signal Processing"** during 26th-30th Dec 2006 for the faculty of JNNCE and PAC members. The course was inaugurated by Dr A V Subramanyam, Principal, JNNCE on Jan 26, 2006. He emphasized on the importance of DSP since all the modern communication was based on

the DSP concepts. Shri Satya Sudhakar Y, corporate trainer from Aureole Technologies Pvt Ltd, Bangalore and the main resource person, handled the first three days sessions on DSP. Topics covered on these days were on Flavours of Fourier Spectra, Linear Time Invariant Systems, Concepts of Complex Signals, Fixed Point Number representation in DSP Algorithm, FFT algorithms, Designing of Filters and Sampling. On 29th Dec 2006, Dr Srinivasa Rao Kunte introduced Wavelet Analysis and Wavelet Transforms, which was followed by introduction to DSP Processors and introduction to MATLAB and its use in DSP by Prof Shri H K Harish. A hands-on lab session on DSP using MATLAB was conducted in the afternoon sessions. On the concluding day, Dr R Srinivasa Rao Kunte introduced Artificial Neural Networks and application of Wavelet Transforms and Neural Networks in Handwritten Character Recognition System. Dr S N Jagadeesha, Prof & Head of IS&E Dept, JNNCE gave a talk on Adaptive Signal Processing & Filters and Ms M S Bharathi gave the DSP Kit Demo.

DISTINCTIONS

Dr T K Alex (F108298L), Director, Lab for Electro-Optics, ISRO, Bangalore was awarded Padmasri Award by the President of India in Science and Engineering-2007, on Republic Day 2007.

Dr B K Bhaumik (F106318), Incharge Physics Lab, Northern Region & Coordinator Emergency Response Centre, Dept of Atomic Energy, Delhi, has been selected to receive **"The World Medal of Freedom"** by the Governing Board of Editors of the American Biographical Institute. Dr B K Bhaumik has received this honour for his significant accomplishments in the field of Geoscientific Data Analysis.

NEWS TITBITS

- Internet search specialist Google has announced its latest version of the Google toolbar 4. This new version of Google toolbar is customizable, with new features that would enable users to personalize their search and browse their favourite content more efficiently without first having to visit the Google homepage.

- British Telecom (BT) is all set to enter the country in a major way. BT has already got the Foreign Investment Promotion Board's (FIPB) clearance to offer national and international services in India, is readying its foray into eight other telecom-related sectors in the country. These include offering fixed-line telephony, IT and telecom-related consultancy services, hardware and software solutions, setting-up an R&D center, call centers and BPOs and providing services permitted under the ISP license, including VPN services.

- BSNL, the country's largest telecom service provider, has decided to diversify its business portfolio and other services in the IT space. The company will soon announce its foray into web hosting, server colocation, customer vault services, premium mail services, online security solutions, online gaming and data centre facilities. A series of other IT solutions are also in the pipeline, but are yet to be finalized.

- TRAI wants the current international long distance guidelines to be amended to curb monopoly and provide a level playing field to new players. In addition, the regulator has demanded it must be allowed to fix and regulate cost-based access charges for international bandwidth in order to ensure that the prices are transparent, non-discriminatory and fair. At present, international bandwidth, which is monopolized by the incumbents, costs 40-60% more than international rates.

Call for Papers

38th Mid-Term Symposium of the IETE

EMERGING TRENDS IN INSTRUMENTATION AND PROCESS AUTOMATION
7-8 April 2007, Vadodara

Papers falling in the following broad areas are invited for presentation:-

- Emerging Process Automation Protocols
- Smart Instrumentation Protocols
- Intelligent Field Devices
- Field Bus Foundation
- Real Time Oil Field Management
- Wireless Transmitters and Applications
- Custody Transfer and Terminal Automation
- Ultrasonic Measurement Systems
- Hardware and Software Challenges in Process Automation
- IT: Enabler for Process Automation
- Integrated Asset Management
- Occupational Hazards of Process Automation
- Process Automation and Managerial Concern

Deadlines for the paper submission

Abstract: 15th March 2007   send your papers at mts_iete@yahoo.co.in

Final paper 25th March 2007   (Subjected to the acceptance of the papers by IETE)

Contact Person : Wg Cdr S R Vasavada (Retd), Chairman, IETE Vadodara Centre, 2250316 (R) 9426325146 (M)

Important Notice for all Members

1. IETE Technical Review (TR) has now been uploaded on IETE websites www.iete.org and www.iete.info. This is freely downloadable and each issue of TR will be available on websites for six months. **Hard copy of TR commencing Jan-Feb 2007 issue will not be mailed to Corporate and Organizational Members who have not exercised their option to receive hard copy of the journal.**

2. A Student Interactive Cell (SIC) has been established at IETE HQ (Ground Floor) to attend to the queries of the students. The contact telephone number of the cell is 011-4150 6490 (D), 24631830/40/50-Extn-57 and the e-mail: **sic@iete.info.** Students are advised to contact SIC for all queries / information /help. Students visiting IETE Hq are requested to contact Reception and SIC for all kind of information/ help. Students who complete their AMIETE/ DIPIETE may send their resume at sic@iete.info for placement assistance.

3. All IETE local /sub-centres are requested to send regularly the inputs of currently conducted technical programmes / activities and other relevant information along with suitable photographs with clear captions and names to the IETE HQ latest by **10th** of every second month to incorporate these in the IETE Newsletters for bimonthly publication.

4. All IETE Members are requested to keep IETE HQ updated with their latest addresses and relevant details to facilitate timely delivery of IETE Journals and important letters.

5. **"Call for Nominations"** for IETE Main Awards has been published in the issues of IETE Technical Review, Vol 23 No 6, Nov-Dec 2006 and IETE Journal of Research Vol 52 No 6, Nov-Dec 2006 issue. We solicit your support for disseminating this information for wider circulation and your timely response in forwarding suitable nominations by due date.

OBITUARY

Maj Gen (Retd) C M Logani, VSM (F050258L) the immediate past Secretary General of IETE, expired on Dec 25, 2006 due to an aggravated illness. He served IETE HQ from Dec 2003 till Oct 2006, after retiring from the Corps of EME as Additional Director General, EME, Army HQs. An alumnus of National Defence Academy, he did his BTech from MCEME, Secunderabad and was awarded the DGEME Gold Medal for standing first in the course. He won many other medals on merit during his lifetime. During his long career in the Army he held various important appointments.

In addition to his total involvement with various IETE assignments, he contributed immensely towards betterment of the staff. He always encouraged and supported the staff for higher education. With his sudden demise, IETE has lost a sincere and a dear colleague.

He is survived by his wife and two daughters. We deeply regret his sad demise and offer our condolences to the bereaved family. All of us at IETE pray that his departed soul rests in peace.

CALENDAR OF EVENTS

Subject	Date	Venue	Contact
☞ Seminar on "Wireless Technology: A Road Ahead"	9-10 Mar 2007	Dharwad	Shri R C Biradar, Asstt Professor, ECE Department, SDM College of Engg & Tech, Dhavalgiri, Dharwad- 580 002 E-mail : ietedwd@yahoomail.com Ph: (R) 0836 2460218 (M) 9449187903 (O) 0836 2447465
☞ The Conference on "Embedded Systems and Applications"	10-11 Mar 2007	Mysore	Shri A Vijayendra Chairman IETE, Mysore Sub-Centre, C 3/2, RTTC Staff Quarters, T K Layout, Mysore 570 009 Ph: 9448486870 E-mail : avijayendra@bsnl.co.in
☞ National Level Student Paper Contest on "Emerging Trends in Electronics, Communications, Electrical, Information Technology & Computer Science"	16-17 Mar 2007	Tirupathi	Prof S Narayana Reddy Coordinator, Dept of EEE, S V University, Tirupati- 517 502 (M) 98489 68270 E-mail : snreddysvu@yahoo.com
☞ Conference on "Micro-Controllers & Embedded Systems"	17-18 Mar 2007	Aurangabad	Dr S C Mehrotra Chairman, IETE Aurangabad Sub-Centre C/o Dept of Comp Science & Information Technolog, Dr Babasaheb Ambedkar Marathwada Univ, Aurangabad- 431 004 Ph: 0240-2400431-37 Ext 461 E-mail : mehrotra_suresh@yahoo.com
☞ Inauguration of IETE premises at Warangal sub-centre & seminar on "ICT for Rural Development"	31 March 2007	Warangal	Prof K Kishan Rao Chairman, IETE Warangal sub-centre KITS Campus, Yerragattuhillock, Warangal-506015 Phone : 0870 256 4888 E-mail : reddycvik@rediffmail.com
☞ 38th Mid-Term Symposium of IETE on **"Emerging Trends in Instrumentation and Process Automation"**	7-8 Apr 2007	Vadodara	Wg Cdr S R Vasavada (Retd) Chairman, IETE Vadodara Centre, 501-506, Vraj Siddhi Tower, Khanderao Market, Char Rasta, Rajmahal Road, Vadodara 390 001 Ph: 0265 2422475, 09426325146 E-mail : iete@eth.net; mts_iete@yahoo.com
☞ World Congress on "Urban Infrastructure in Developing Countries"	12-16 Nov 2007	New Delhi	Shri S R Pandey, Organizing Secretary, World Congress on Urban, Infrastructure in Developing Countries, The Institution of Engineers (India), Engineers Bhawan, Bahadur Shah Zafar Marg, New Delhi-110 002 Ph: +91 11 2337 0548, 2337 0168 Fax: +91 11 2337 8851; E-mail : oc@worldcongress07.org Website : www.worldcongress07.org
☞ The 10th International Symposium on Wireless Personal Multimedia Communications, Jaipur (WPMC'07)	3-6 Dec 2007	Jaipur	Secretariat, WPMC'07 The LNM Institute of Information Technology, Jaipur Rupa-Ki-Nangal, P O Sumel, Via Kanota Jaipur-303012 Ph: 0141-217 0717/5189213 Fax: +91 (141)-5189 216; E-mail: vsinha@iitk.ac.in Websites: http://www.wpmc2007.com
☞ International Conference on Computational and Intelligence Multimedia Applications 2007 (ICCIMA'07)	13-15 Dec 2007	Sivakasi	Dr S Arivazhagan, Organizing Chair ICCIMA'07 Dept of Electronics & Communication Engg, Mepco Schlenk Engineering College, Sivakasi- 626 005, Tamil Nadu Ph: +91 4562 235400, 235000 Fax: +91 4562 235111; Email : iccima07@mepcoeng.ac.in URL: www.iccima07.mepcoeng.ac.in

Lighting of the ceremonial lamp by the dignitaries during zonal seminar at IETE Visakhapatnam centre.

Dignitaries on the dias at zonal seminar on "Emerging and Converging Communication Technologies" at Visakhapatnam centre

The Chief Guest, Er Suharsh Avasthi, MD, Purvanchal Vidut Vitaran Nigam Ltd, on the inauguration of the national seminar on "Power Engg Controls" along with President IETE, Shri Narayana; Lt Gen A K Agarwal and Er K S Singh at Varanasi centre.

Dignitaries releasing the souvenir at the national seminar at Varanasi centre.

Presentation of memento at national seminar at IETE Varanasi centre.

Prof V U Reddy, Chief Scientist, Hello Soft India Pvt Ltd, Hyderabad, the Chief Guest, delivering the keynote address during the two-day workshop at IETE Warangal sub-centre.